dose of the product for infusion in the form of a disk. The device also includes a station feeding the infusion product; and a revolving drum equipped with a plurality of pistons arranged radially on a peripheral surface of the revolving drum and designed to form a disk of the infusion product and to release the disk in the filter material, each piston being able to slide along a respective axis and having a hollow head forming an impression designed to receive a dose of the infusion product fed by the feed station, wherein each piston is rotatably mounted on the revolving drum for continuously rotating about said respective axis.

Claims 23 recites a device for dosing and forming disks for pods containing a product for infusion, the pods being of the type including a piece of filter material containing a dose of the product for infusion in the form of a disk. The device also includes a station feeding the infusion product; and a revolving drum equipped with a plurality of pistons arranged radially on a peripheral surface of the revolving drum and designed to form a disk of the infusion product and to release the disk in the filter material, each piston being slidably mounted on the revolving drum for sliding along a respective axis and having a hollow head forming an impression designed to receive a dose of the infusion product fed by the feeding station, wherein there is an arc-shaped wall round the outer surface of the revolving drum, said arc-shaped wall defining a tamping surface opposite to the impression of the pistons in a part of the circular path, and wherein each piston is movable along the respective axis towards said arc-

shaped wall for compressing the infusion product included into the impressions against said tamping surface.

Applicant respectfully submits that Romagnoli, Rossi, Mattos and Lofman, alone or in any combination thereof, fail to teach or suggest the invention recited by Claim 12 and 23.

For example, Applicant notes that Romagnoli discloses a cylindrical dispensing drum furnished with at least one crown of pockets dispensing chambers circumferentially equally spaced around the peripheral wall of the same cylindrical drum. The pockets dispensing chambers are opened on the outer cylindrical surface of the cylindrical drum and are defined along an entire inner circumference of an axially hollow little cylinder made in the cylindrical drum's body in combination with a piston member slidingly set up inside said axially hollow little cylinder. See column 4, lines 52-63 of Romagnoli.

Every piston member sliding inside the corresponding cylinder is supported by a respective axis extending in parallel with reference to the rotation axis of the cylindrical dispensing drum as far as to extend itself with its opposite ends beyond the opposite sides of said cylindrical dispensing drum.

The cylindrical dispensing drum passes the pockets below a feed hopper for the drawing of the product. The piston member of the pocket that, by rotation of the cylindrical drum, is positioned below the feed hopper at a maximum distance from the periphery of the cylindrical drum so as to permit the input of the product in the pocket. Due to the continuous rotation of the drum, the piston member is gradually moved as much as possible toward the periphery of the

drum so as to be situated a minimum distance from the periphery of the same drum in correspondence of the top dead centre to determine the quantity of product in the pocket. Continuing the rotation of the drum, such a quantity of product is continuously controlled, at first below a smoothing element, and then by a filter-paper strip advancing at the same peripheral speed of the cylindrical drum as far as the bottom dead centre of the same drum.

As such, the product remains completely imprisoned in the pocket and avoids particles of product being inserted between the contacting surfaces of the filter paper strip and the drum.

In correspondence with the bottom dead centre, the product begins its discharge from the pocket lying down on the horizontal stretch of filter-paper strip while moving towards a packaging station of the packaging machine. Contemporaneously, the piston member begins to return to its aforesaid maximum distance from the periphery of the drum below the feed hopper.

As admitted by the Office Action, Romagnoli fails to disclose a tamping device and reciprocating pistons which rotate about reciprocating axes.

To cure the admitted deficiency of Romagnoli, the Office Action looks to Rossi and asserts Rossi teaches that it is old and well known in the art to provide a forming mechanism for forming infusion pods having a tamper mechanism 74, moving along a reciprocating axis and rotating rod 76, which rotates around a reciprocating axis of the tamper device.

Applicant respectfully submits that the Office Action mischaracterizes the actual teachings of Rossi. That is, Applicant submits that Rossi actually

teaches a unitary mould 64 having the purpose of which is to preform and fill with coffee powder a lower filter-paper ribbon. As such, the unitary mould 64 is formed of a base plate or sole 66 having a projection 68, a hole 70 for passage of measures of coffee powder 72, and a tamper 74 with an overturned cup. The tamper is supported by a shaft 76, a cover 78, and two stems 80 and 82 that are integral with the cover and driven through conventional motion transmission mechanisms 84 and 86 that are fitted with springs to hold the stems 80 and 82 lifted against the cams 34 and 38, respectively, in order to supply the mould or punch 64 with a reciprocating movement.

The tamper 74 mounted on the rotating shaft 76 is driven in its reciprocating movement by a stem 88 equipped with a side protuberance or pin 90 designed to engage a shaped groove 92 defined in the cam 36 in such a manner as to permit positive engagement of the cam 36 with the stem 88 in both directions of its reciprocating movement. The stem 88 is fitted in a sliding manner in a sheath 94 fixed to the crosspiece 62 and is fitted in a lower part with a thrust bearing 96 designed to connect the stem 88 with the rotating shaft 76 in such a manner as to permit it free rotation and reciprocating movement conferred by the stem 88.

From the above discussion and details illustrated in Figures 1-2 of Rossi, Applicant respectfully submits that Rossi discloses a tamper device having three in-line cylinders (84, 88, 86) that are actuated by a straight shaft perpendicular to the three cylinders. One of the cylinders, namely cylinder 88, has a reciprocating and revolving piston 76.

Looking back to Romagnoli, as discussed above, Romagnoli discloses a rotary drum having a crown of cylinders equally spaced around the circumferential peripheral wall of the drum, with reciprocating pistons provided in each cylinder.

Therefore, Applicant respectfully submits that the tamper 74 disclosed by Rossi can not be combined with Romagnoli's disclosure since there is not any hint in Rossi on how to integrate the three in-line cylinders that are actuated by a straight shaft perpendicular to the three cylinders into a rotary drum having a crown of cylinders equally spaced around the circumferential peripheral wall of the same cylindrical drum.

Applicant respectfully but forcefully submits that the asserted "obvious" modification of Romagnoli in view of Rossi, that is, providing the rotary drum of Romagnoli with the in line three cylinders (namely the tamper device and the rotating piston) disclosed by Rossi, is impossible to accomplish such that the asserted modification would never be "obvious" to one of ordinary skill in the art given the extremely high likelihood that such a modification would not be successful and would result in a product that cannot operate or function properly, let alone for its intended purpose.

With regards to Claim 23, in addition to the reasons given above as to why one of ordinary skill in the art would not consider it obvious to modify Romagnoli according to the teachings of Rossi, Applicant notes that Romagnoli also fails to disclose that each piston is movable along the respective axis towards an arc-shaped wall for compressing the infusion product included into

the impressions against the tamping surface of the arc-shaped wall.

Rather, and by contrast, Romagnoli discloses that the pistons, when facing the arc-shaped wall, do not move along the respective axis towards the arc-shaped wall, since the arc-shaped wall 8 is a smoothing element and not a tamping element. More specifically, Romagnoli discloses at column 6, lines 30-37 that "said piston member is gradually moved toward the periphery of the drum 1 as far as to be situated at the minimum distance from said periphery of the same drum 1 in correspondence of the top dead centre so to determine the quantity 16 of product 3 in the pocket 5 because of the smoothing element 8". In other words, Romagnoli discloses that each piston reaches the circular section of the smoothing element 8 when the piston is already at the minimum distance from the periphery of the drum, and therefore no further stroke of the piston towards the smoothing element is allowed (so leading to no compressing action on the product in the impressions).

Rossi fails to disclose an arc-shaped wall for compressing the infusion product during the transfer of the infusion product from a pick-up station to a discharge station (namely during the rotation of the drum).

Therefore, Applicant respectfully submits that even if Romagnoli were modified according to the teachings of Rossi, the resulting modified Romagnoli device would not result in each piston being movable along the respective axis towards an arc-shaped wall for compressing the infusion product included into the impressions against an arc-shaped wall during the rotation of the drum.

Mattos is cited for teaching that it is know to provide a metering drum

with a cam 38, having first and second arcuate portions 46, 48, where an upper portion 48 adjusts a piston 37 during operation. As such, Applicant respectfully submits that Mattos does not cure or otherwise address the above described and/or admitted deficiencies of Romagnoli.

Lofman is cited for teaching that it is known to provide a belt conveyor 23 that is powered by suction means. As such, Applicant respectfully submits that Lofman does not cure or otherwise address the above described and/or admitted deficiencies of Romagnoli.

In view of the above, Applicant respectfully submits that Claims 12 and 23 are not rendered obvious by Romagnoli, Rossi, Mattos and Lofman, either alone or in any combination thereof, and should be deemed allowable.

Claims 13-22 depend from Claim 12. It is respectfully submitted that these dependent claims be deemed allowable for at least the same reason(s) Claim 12 is allowable, as well as for the additional subject matter recited therein.

Applicant respectfully requests withdrawal of the rejections.

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 12-23, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.